

A ready-to-drink plant-based oral nutritional supplement is highly complied with, accepted, tolerated and improves clinical outcomes in adult community-based patients at risk of disease related malnutrition: a multi-centre prospective study.<sup>1</sup>



This information is intended for healthcare professionals only. Fortisip PlantBased 1.5kcal is a Food for Special Medical Purposes for the dietary management of disease related malnutrition and must be used under medical supervision.

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**NUTRICIA**  
**Fortisip**  
**PlantBased**  
**1.5 kcal**

## Summary

### Rationale:

The use of oral nutritional supplements (ONS) has been shown to be effective for managing disease-related malnutrition (DRM). There is currently no ready-to-drink<sup>2</sup>, plant-based oral nutritional supplement (ONS) available to patients at risk of disease-related malnutrition (DRM). The aim of this one-arm multi-centre intervention study was to evaluate the effects of a plant-based ONS in community adult patients at risk of DRM.

### Methods:

A ready-to-drink, plant-based, nutritionally complete ONS (300kcal, 12g protein: 1.5kcal/ml, Nutricia Ltd., UK), was prescribed ( $\geq 1$ /day) alongside dietary advice for 7-28 days, to adult community-based patients with multiple diagnoses at risk of DRM. Daily compliance (% consumed vs prescribed), reason for requiring a plant-based ONS, body weight, BMI (Body Mass Index), 'MUST'<sup>3</sup> score<sup>3</sup>, dietary intake (24h dietary recall), appetite (Simplified Nutritional Appetite Questionnaire (SNAQ<sup>4</sup>)) ONS palatability and gastrointestinal (GI) tolerance were assessed. Intention-to-treat data analysis was performed.

### Conclusion:

This study: i) shows that a plant-based ONS is highly complied with, improving nutritional outcomes alongside dietary advice; and ii) highlights that there were a variety of reasons why patients at risk of DRM may require a ready-to-drink, nutritionally complete, plant-based ONS. Further investigation is required to ascertain the clinical benefits of using a plant-based supplement in the management of patients with malnutrition.

## Results

Twenty-four patients (age:59±18years; BMI:18.9±3.3kg/m<sup>2</sup>) were included. Compliance was excellent (94±16%) and patients confirmed that the ONS was convenient (92%) and fitted in well with their current diet (83%). Patients required a plant-based ONS due to personal preference (33%), cultural/religious reasons (28%), veganism or wish to reduce animal-derived food consumption (17%), sustainability reasons (17%) and health reasons (15%). High risk of malnutrition<sup>3</sup> reduced from 20 to 16 patients ( $p=0.046$ ) with a significant increase in body weight (+0.6±1.2kg,  $p=0.02$ ) and BMI (+0.2±0.5kg/m<sup>2</sup>,  $p=0.03$ ) at intervention end. Total energy intake significantly increased (+371±457kcal/day,  $p=0.001$ ), as well as protein intake (+14±39g/day,  $p=0.03$ ). Appetite (from 11.3±3.0 to 11.9±3.5,  $p=0.13$ ) and food-only energy intake (+130±325 kcal/day;  $p=0.43$ ) were maintained throughout the study. Patients rated the palatability as good to excellent (out of 10) for taste (6.3±2.5), aftertaste (6.5±2.4), smell (6.8±2.3), appearance (7.5±2.1), and thickness (7.5±2.0). GI symptoms were stable throughout the study with patients (79%) and healthcare professionals (88%) confirming that the plant-based ONS was well tolerated.



\*Malnutrition Universal Screening Tool.

References: **1.** Nutricia UK ACBS trial, data on file 2022. **2.** MIMS January 2023 **3.** Frank M, Sivagnanaratnam A, Bernstein J Nutritional assessment in elderly care: a MUST! BMJ Open Quality 2015;4:u204810.w2031. doi: 10.1136/bmjquality.u204810.w2031. **4.** Wilson MM, et al. Appetite assessment: simple appetite questionnaire predicts weight loss in community-dwelling adults and nursing home residents. American Journal of Clinical Nutrition. 2005;82(5):1074-81.